

under 35 U.S.C. §103(a) as purportedly being obvious over Bazoon and Parson, in combination with various other references. Applicant respectfully traverses each of these rejections.

**A. Retention Periods**

Each of independent claims 1, 20, 39, 58, 65, and 72 relates to reducing a previously-defined retention period for a unit of data stored on a storage system, **where the retention period defines a period during which the unit of data cannot be deleted.** In Applicant's response filed on March 28, 2008, Applicant pointed out that Bazoon fails to disclose this limitation, as Bazoon discloses the use of a storage period for a document that is fundamentally different from the claimed retention period. Applicant pointed out that the storage period of Bazoon defines a **maximum** period during which a document is permitted to exist in a knowledge repository, as at the expiration of this period the document is automatically deleted. By contrast, a retention period for a unit of data defines a **minimum** period during which the unit of data **must** exist on the storage system (i.e., the unit of cannot be deleted during the retention period).

In response to this argument, the Examiner cites a number of portions of Bazoon that he believes discloses a retention period for a unit of data that defines a period during which the unit of data cannot be deleted. *See* Office Action, pages 10-11. As discussed in detail below, each of these portions of Bazoon describes a storage period that defines a time at which a document is automatically deleted from the knowledge repository (i.e., a maximum amount of time during which the document is permitted to exist). None of these portions of Bazoon describe a period during which a unit of data cannot be deleted.

The Examiner cites ¶0011 of Bazoon, which states that "documents that have an expired storage period are removed." This portion of Bazoon **does not** state that documents that do not have an expired retention period cannot be deleted. Quite to the contrary, this portion of Bazoon states that if the storage period for a document has expired, it is deleted automatically. Indeed, at ¶0020, Bazoon defines the term storage period as a value or value range which tracks the amount of time remaining for the document to stay in a database. Thus, at ¶0011, Bazoon simply states that if the storage period has expired, the document is removed from the database.

The Examiner also points to the portion of ¶0020 that states, “[f]or example, the storage period may contain a value that represents the document’s remaining number of months, days, or hours in the knowledge repository.” This portion of Bazoon indicates that the storage period defines a time of automatic deletion for document in the knowledge repository in terms of the number of months, days, or hours, the document may remain the knowledge repository. Again, this paragraph relates to the automatic deletion of a document at the end of the storage period, but does not say anything about preventing deletion of a document prior to expiration of the storage period.

The Examiner also cites the portion of ¶0024 that states, “[w]hen the document have an expired storage period, then documents can be automatically removed from the knowledge repository in block 28.” Again, this paragraph relates to automatic deletion of a document, but does not say anything about preventing deletion of a document.

The Examiner also cites the portion of ¶0034 that states, “[a] document removal process 50 is included and configured to remove documents from the knowledge repository 38 that have expired storage periods.” It should be apparent that his paragraph discusses automatically removing a document with an expired storage period. It does not say anything about preventing deletion of a document during the storage period.

As should be clear from the discussion above, Bazoon in no way discloses that storage periods define a time during which a unit of data **cannot** be deleted as recited in the independent claims. Consequently, Bazoon does not disclose a retention period during which the at least one unit of data cannot be deleted from the at least one CAS system, as recited in each of the independent claims, and therefore necessarily does not disclose sending or receiving a request to reduce the length of the retention period and/or reducing the length of the retention period in response to such a request.

#### **B. Content Addresses**

In Applicant’s response of March 28, 2008, Applicant pointed out that the cited references also fail to disclose the limitation of claims 1, 20, 39, 65, and 72 that recite, “...at least one content addressable storage (CAS) system wherein the at least one host identifies units of data on the at least

one CAS system using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data...”

Applicant noted that the Office Action appears to assert that the CAS system recited in the claims reads on the CAM disclosed by Parson and pointed out that accessing data using these two types of systems is fundamentally different. Applicant pointed out that in Parson, a piece of data is associated with a key and is accessed by providing a hash of the key to the CAM. Applicant pointed out that this is different from a CAS system in which units of data are identified **using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data**. Applicant noted that neither the key value, or the hashed key value (e.g., integer index) disclosed in Parson is based, at least in part, on at least a portion of the content of the corresponding unit of data.

In response to this argument, the Office Action asserts that Applicant’s specification, “fails to provide a specific and deliberate definition of ‘content addressable storage (CAS) system’” and asserts that the term is being given its broadest reasonable interpretation of “a memory-based storage method in which data items are accessed not on the basis of a fixed address or location but by analysis of their content.”

Applicant notes that each independent claim recites a content addressable CAS system in which units of data are identified **using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data**. Thus, regardless of the interpretation that the Examiner assigns to “content addressable storage system,” the claim requires that units of data be identified on such a system **using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data**. This limitation is discussed in numerous places in the specification, including, for example, page 12, lines 30-31 which states that, “[i]n a content addressable system, data is stored using a content address generated based upon the content of the data itself.”

Even if the Examiner considers the CAM of Parsons to be a content addressable storage system (which Applicant does not concede), Parsons does not disclose or suggest that units of data are identified in the CAM **using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data**.

Rather, in Parson, a unit of data is accessed using a hash of a corresponding key. Thus, in response to supplying a hash of a key value to the CAM, the data that corresponds to the key value is returned from the CAM. In contrast, each of the independent claims recites a CAS system, wherein at least one host identifies units of data on the at least one CAS system **using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data.** Neither the key value, or the hashed key value (e.g., integer index) disclosed in Parson is based, at least in part, on at least a portion of the content of the corresponding unit of data. Rather, in Parson the key value for a data item is hashed to generate an identifier that can be used to access the data item. The data item itself is not hashed.

In view of the foregoing, it should be appreciated that Bazoon and Parson, taken alone or in combination fail to disclose or suggest the use of a retention period during which a unit of data cannot be deleted, and fail to disclose or suggest a CAS system wherein a host computer identifies units of data on the at least one CAS system using content addresses each generated based, at least in part, on at least a portion of the content of the corresponding unit of data. Thus, each of claims 1, 20, 39, 65, and 72 patentably distinguishes over the combination of Bazoon and Parson, and it is respectfully requested that the rejection of these claims be withdrawn.

Claims 2-19 depend from claim 1, claims 21-38 depend from claim 20, claims 40-57 depend from claim 39, claims 59-64 depend from claim 58, claims 66-71 depend from claim 65, and claims 73-80 depend from claim 72. Each of these dependent claims is allowable for at least the same reasons as its respective base claim, and it is respectfully requested that the rejection be withdrawn.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: October 2, 2008

Respectfully submitted,

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